

BEFORE THE  
PUBLIC SERVICE COMMISSION OF WISCONSIN

Application of Madison Gas and Electric Company for a Certificate of Authority, Approval of Fixed Financial Parameters and Capital Cost Rate-Making Principles, and Any Other Authorizations Needed to Construct and Place Into Operation a 30 MW Generating Facility, known as the Top of Iowa Wind Farm, Phase 3, in Worth County, Iowa

Docket No. 3270-CE-126

**APPLICATION FOR CERTIFICATE OF AUTHORITY**

*To the Public Service Commission of Wisconsin:*

Pursuant to Wis. Stat. §§ 196.02(1) and 196.49, and Wis. Adm. Code §§ PSC 2.07, 112.05 and 112.06, Madison Gas and Electric Company (“MGE”) submits this application for a Certificate of Authority (“CA”), and any other approvals or authorizations needed to construct, install and place in operation an approximately 30 megawatt wind-powered generating facility, known as the Top of Iowa Wind Farm, Phase 3 (“Top of Iowa 3” or “TOI 3”). MGE is concurrently filing an application for fixed financial parameters and capital cost rate-making principles, pursuant to Wis. Stat. § 196.371.

This application and the accompanying Technical Support Document, which is incorporated herein by reference, support MGE’s CA request. As set forth in greater detail below, the proposed project meets each of the legal standards governing the Commission’s authority to approve construction of new generation sources. The project will not (1) substantially impair the efficiency of MGE’s service, (2) provide facilities unreasonably in excess of MGE’s probable future requirements, nor (3) add to the cost of MGE’s service without proportionally increasing the value or available quantity of service. Wis. Stat. § 196.49(3)(b).

The project also complies with the Energy Priorities Law, Wis. Stat. § 1.12, and will enable MGE to comply with the Renewable Portfolio Standard (“RPS”). Wis. Stat. § 196.378.

## **PROJECT DESCRIPTION**

MGE is an investor-owned public utility, as defined in Wis. Stat. 196.01(5), which is engaged in the generation and distribution of electricity to approximately 136,000 customers in Dane County, and in the purchase, transportation and distribution of natural gas to customers in Columbia, Dane, Iowa, Juneau, Monroe and Vernon Counties. MGE is a wholly-owned subsidiary of MGE Energy, Inc. (“MGE Energy”), which is a holding company as defined in Wis. Stat. § 196.795(1)(h).

The addition of the TOI 3 Wind Farm to MGE’s generating portfolio is in response to MGE’s customers’ growing energy demands. TOI 3, together with MGE’s efforts to reduce load growth through conservation and other energy efficiency programs, will allow MGE to continue to provide reliable, environmentally responsible and reasonably-priced electric service to its customers.

TOI 3 will be owned and operated by MGE. All energy and capacity produced by TOI 3 will be the property of MGE. The project site is located approximately 4 miles west of Kensett, in Sections 21, 26, 27 and 28 of Brookfield Township, Worth County, Iowa. TOI 3 will include 18 wind turbines rated at 1.65 MW each resulting in a total nameplate capacity of 29.7MW.

### **I. Top of Iowa 3 Complies with the Standards for Granting Certificates of Authority under Section 196.49.**

Section 196.49 of the Wisconsin Statutes authorizes the Public Service Commission (“PSC”) to grant certificates of authority for the construction of new plant, equipment, property and facilities by public utilities. Specifically, subsection (3) states that no project may proceed

until the Commission has certified that the public convenience and necessity require the proposed project. The Commission may refuse to certify a project if it will:

- A. Substantially impair the efficiency of the service of the public utility.
- B. Provide facilities unreasonably in excess of the probable future requirements.
- C. When placed in operation, add to the cost of service without proportionally increasing the value or available quantity of service....

Wis. Stat. § 196.49(3)(b).

This application and the accompanying Technical Support Document and appendices demonstrate that the addition of TOI 3 to MGE's generation portfolio is reasonable and in the public interest. TOI 3 will improve, not impair, MGE's ability to provide reliable, and reasonably-priced electric service to its customers. TOI 3 will not provide facilities unreasonably in excess of future requirements, and will allow MGE to timely and cost-effectively meet the state's new RPS requirements. Finally, when placed in service, TOI 3 will offset the use of other more expensive generation sources, so it will not add to the cost of service without increasing the value or quantity of service.

Section 196.49 also states that "the commission may not issue a certificate...for the construction of electric generating equipment and associated facilities unless the commission determines that brownfields, as defined in s. 560.13(1)(a), are used to the extent practicable." Wis. Stat. § 196.49(4). As the Technical Support Document describes, the TOI 3 project was the only technically and economically feasible project that would allow to MGE to reliably meet its RPS requirements, and therefore, it was not practicable to utilize a brownfield site in this instance.

## **II. TOI 3 will allow MGE to timely and cost-effectively comply with the Renewable Portfolio Standard.**

Wisconsin's Renewable Portfolio Standard ("RPS") was first enacted as part of the "Reliability 2000" provisions of 1999 Wisconsin Act 9, and is codified at section 196.378 of the Wisconsin Statutes. The RPS mandates that all Wisconsin electric utilities supply a portion of their retail electric sales from renewable sources. 2005 Wisconsin Act 141 amended the RPS to increase the percentages of renewable energy sources in Wisconsin utility portfolios, and to establish the goal that 10% of all electric energy consumed in the state be supplied by renewable energy by 2015.

The statute defines the *baseline renewable percentage* for each utility as "the average of an energy provider's renewable energy percentage for 2001, 2002, and 2003." Wis. Stat. § 196.378(l)(ag). It then sets the RPS requirement for each utility, based on the provider's baseline percentage, as follows:

- a. For the years 2006, 2007, 2008, and 2009, each electric provider may not decrease its renewable energy percentage below the electric provider's baseline renewable percentage.
- b. For the year 2010, each electric provider shall increase its renewable energy percentage so that it is at least 2 percentage points above the electric provider's baseline renewable percentage.
- c. For the years 2011, 2012, 2013, and 2014, each electric provider may not decrease its renewable energy percentage below the electric provider's renewable energy percentage required under subd. 2. b.
- d. For the year 2015, each electric provider shall increase its renewable energy percentage so that it is at least 6 percentage points above the electric provider's baseline renewable percentage.
- e. For each year after 2015, each electric provider may not decrease its renewable energy percentage below the electric provider's renewable energy percentage required under subd. 2. d.

Wis. Stat. § 196.378 (2) (a)-(e).

MGE anticipates that its RPS requirement will be approximately 129 GWh by 2010 and 283 GWh by 2015. In 2005, MGE's portfolio included approximately 65 GWh of total qualified renewables. *See* Technical Support Document, at § 2.2.

MGE is proposing to add approximately 30 MW of wind energy resources at TOI 3 to meet its RPS requirement. Based on current projections, TOI 3 will meet the Company's 2010 RPS needs, but MGE may need to acquire additional qualified sources to meet its 2015 requirements.

### **III. TOI 3 Complies with the Energy Priorities Law.**

Chapter 196 mandates that:

To the extent cost-effective, technically feasible and environmentally sound, the commission shall implement the priorities under s. 1.12 (4) in making all energy-related decisions and orders, including advance plan, rate setting and rule-making orders.

Wis. Stat. § 196.025(1). The referenced "priorities" are stated as follows:

In meeting energy demands, the policy of the state is that, to the extent cost-effective and technically feasible, options be considered based on the following priorities, in the order listed:

- (a) Energy conservation and efficiency.
- (b) Noncombustible renewable energy resources.
- (c) Combustible renewable energy resources.
- (d) Nonrenewable combustible energy resources, in the order listed:
  - 1. Natural gas.
  - 2. Oil or coal with a sulphur content of less than 1%.
  - 3. All other carbon-based fuels.

Wis. Stat. § 1.12(4)

Wind energy is a noncombustible renewable energy source, the second highest priority listed in the Energy Priorities Law. Only "energy conservation and efficiency" are assigned a higher priority. Because this project is designed primarily to meet MGE's RPS requirement,

however, energy conservation and efficiency cannot be substituted under the energy priorities law. Wind energy is currently the most cost-effective noncombustible renewable energy resource.

Solar energy production is another noncombustible renewable energy alternative. While MGE has experience with a variety of solar photovoltaic technologies, through various installations in its service territory, these installations are small, customer-scale projects and produce little energy. Wisconsin's climate and geography do not allow for economically viable commercial-scale solar installations at this time. Consequently, solar energy is not a viable alternative for addressing the significant energy requirements of the current RPS.

#### **IV. Environmental Considerations.**

TOI 3 is a portion of an out-of-state project that has received or soon will receive all approvals applicable in Iowa and would be constructed regardless of MGE's participation. Thus, approval of MGE's CA application has no environmental consequences.

Nonetheless, MGE has supplied in the accompanying Technical Support Document substantial environmental information, some of it developed in conjunction with the larger project of which TOI 3 was part, that shows the environmental effects of the entire project are minimal. *See* Technical Support Document, Section 5, and Appendices.

### **CONCLUSION**

For the reasons set forth in this application, the accompanying Technical Support Document and appendices, MGE requests that the Commission grant the requested Certificate of

authority, and any other authorizations or approvals necessary to construct and place into operation the TOI 3 Wind Farm.

Dated: January \_\_\_\_\_, 2007.

Respectfully submitted,

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